

Introduction to Law on Electricity
Professor Uday Shankar
Rajiv Gandhi School of Intellectual Property Law
Indian Institute of Technology Kharagpur
Lecture 16
Distribution

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So, we have studied the related provisions on generation and transmission. Now, let us look at where the law stands with regard to distribution. As we know, as we have learned that the provisions related to generation has been liberalized. There is no need to obtain a license for entering into the business of generation of electricity; that is what we have learned. So, delicensing of the generation has shown immense growth in the sector. Now, India has become a country with a surplus power and no denial that this is primarily because of the reform which has been introduced way back in 1991 and which has been given a statutory status through the 2003 Act.

The obvious and necessary reform has also been introduced in other two segments, that is, transmission and distribution. So, we have discussed about transmission in the last session. Today we will be discussing about what are the provisions with regard to distribution. And in that, there is a very remarkable provision which has been made that, I would say that is on parallel licensee, and then we will also see what are the benefits of parallel licensee and we will see in this session that what are the challenges for parallel licensee.

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- **Distribution is the crucial link and weakest in the supply chain**
- **Influences the commercial viability of the sector**
- **Major Concerns are – high distribution losses, theft, low metering levels**
- **Inadequate investment**
- **Restructuring of SEBs**

Now, when you look at the power market, when you look at all the segments viz, generation, transmission and distribution and obviously now, we have another important feature emerging that is trading of electricity that we will talk about in due course. Now, distribution appears to be, or distribution is something which plays a very vital role in strengthening the complete chain system, is the distribution which, in a way, determines that how the power market is going to grow.

The reason being that it is the distribution segment from where the revenue comes for the growth of the market. It is the distribution segment which has the responsibility of charging the revenue on the end consumers, and it is the efficiency in the collection of revenue which is significant for the robust and very solid growth of this sector. But then, when I say that it is the distribution sector which has a vital role to play, which is a crucial link in the market, very sadly, it is also the weakest one in the whole supply chain system.

Distribution segment has not seen the desirable growth, it has not seen the investment, it has not attracted the investment. In fact distribution sector as on date is largely under the state-owned distribution companies, which we also call it as DISCOMS. The desired liberalization drive has not shown its positive impact on this segment, and you can very well connect that if the distribution sector is not attracting the investment, if capital infusion is not happening, then it is not only adversely affecting the ability to generate revenue, generate profit but also the amount needed to improve the infrastructure is not available. And perhaps because of this reason, what we find that you have very high aggregate technical and commercial losses in

the segment, which is a big challenge now. Though of late, we have been working, and we have found that there is considerable reduction in this (AT&C loss) Aggregate Technical and Commercial loss, but there is still path to cover, since it is not only about increasing the installed capacity, it is not only about ensuring the maximum generation of electricity, it is also about how effectively that generated electricity is reaching to the end consumer and that too in a very qualitative way, that too in a very reliable manner. And there where you need investment, and there where you need the real reform to be translated on the ground, but then when you look at the functioning of distribution segment, you would find that there are major issues. It is plagued by a number of factors, and prominent one appears to be, as I said, high distribution losses.

Theft is an important area of concern; the poor infrastructure, which is causing the loss in supply of the electricity, and the very issue of availability of metering at the end of the consumer is another important issue. Because it is not that every consumer, they do have meter, and accordingly, they are being charged by the distribution licensees.

So, these are the issues which are needed to be addressed at the distribution segment. And obviously, as I said that because it is largely owned by the state, the desirable, the expected investment is still elusive, still not coming forward. And though, there are instances where private players have come forward to participate in the distribution segment, but then you would find that they are largely into metro cities. It has not trickled down to tier two or in semi urban areas. And it is not very difficult to visualize that why it is seen in metro areas because there is a possibility of getting the preferred consumer who has the ability to pay.

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- **Distribution segment continues from the point where transmission leaves off**
- **Distribution business is based on a 'cross-subsidy' model - some consumers –industrial, commercial, and large domestic consumers – pay for others**
 - **Charged tariffs higher than the average cost of supply - tariff that is much lower than the cost.**
 - **'subsidy' thus received from the higher tariffs charged to large consumers is referred to as cross-subsidy**

Now, restructuring of a SEBs (State Electricity Boards) have certainly brought certain promises. It was suggested that there is a need to unbundle the vertically integrated sector, and in pursuant to that, you have now three independent segments where you find that there is now, we have a generation which is completely segregated from transmission, and transmission has no vested interest in generation and distribution. So that is what one may say is an outcome of restructuring of State Electricity Boards.

Then, when you technically talk about distinguishing between transmission segment and the distribution segment, so it is all about the transmission segment comes to an end where high voltage electricity is getting, now again, scaled down and which is ready to supply to the end consumer. So that is how the three points are being seen or to be visualized in the power sector. Generation then there is an evacuation of electricity from the generating units at a scale up voltage, and then to the point where again it is getting scaled down and from there, it is reaching to the end consumers. That is what, from there only, you find the distribution licensee starts operating.

Now when you talk about the reason that why distribution segment is not really doing well, one reason, one prominent reason is that when you find the whole business model which is governing this segment is based on cross-subsidy model. It is not basically based on the cost of supply of electricity; it is based on cross-subsidy model and what is cross-subsidy model? Where you find that one set of consumers are given, are being favoured over another one.

So, the actual cost is not been charged from a set of consumers and whatever is the gap, that is what is being charged from the other set of consumers. So, for example, when the cost of supply is, let us say 5 Rupees per unit and then if the preferred consumer, the one who has been considered to be falling under the bracket that they are not in a position to pay, they do not have the ability to pay then they would be charged let say 4.5 per unit then the one who can pay will be charged 5.5 per unit.

So, the former category is paying less than what is the cost incurred, and the latter category is paying more than that. So this is what the latter category is subsidizing; the latter category is subsidizing the former category. Now, we know very well that categorizations of consumer has been very conventional in this country. It has a very old history; you have residential consumer, agriculturalist on the one hand who gets the benefit of cross-subsidy and then you have industrial or commercial consumer who bears the cost of, bears the higher cost of electricity and therefore contributes in that cross-subsidy.

Now this cross-subsidy model in distribution segment what you find is a matter of concern. Though the 2003 Act suggests that it will gradually be reduced or it should be gradually reduced but then the question comes in that is; what shall be the mechanism for reducing this subsidy? Because as I said in the discussion on rural electrification, that it is not only about ensuring the availability of electric lines at the residence of the consumer. It is also about ensuring that the consumer continues to display the interest to get that electricity, and that would be possible only when electricity is available on affordable price.

Otherwise, government will invest for laying down the infrastructure at the remote location, and then it would not be used because the consumer does not have the paying capacity. And therefore, what is suggested is that let there be open market, let there be complete competition, and that would ultimately lead to the fixation of price at a very reasonable rate which will cater the consumers interest. And that is what is needed, and that is how you would find that cross subsidy would be reduced in a gradual manner.

You cannot think of eliminating it in one go otherwise, the whole idea of ensuring the growth of this industry would be incomplete because the growth of this industry does not mean availability of electricity only to the resourceful. Growth of this industry also means that it must have inclusiveness ingrained in it.

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- **The Electricity Act, 2003**
 - **Sec.2(17) distribution licensee means a licensee authorised to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply...**
 - **Distribution system – Sec. 2(19) distribution system means the system of wires and associated facilities between the delivery points on the transmission lines or the generating station connection and the point of connection to the installation of the consumers..”**

Now, when you look at what is distribution system and what is distribution licensee? Let us look at what the 2003 Act says, Section 2 subsection 17 defines distribution licensee as a licensee who is authorized to operate and maintain a distribution system for supplying of electricity to the consumers in his area of supply, meaning thereby when you read this definition one thing is very clear that distribution licensee is one who is under an obligation to supply the electricity to the consumer and not for sale.

If distribution licensee goes for a sale, then the satisfaction of this section will not be there. So, it cannot be for sale, it must be supply of electricity to the consumers, and then it says in his area of supply. Now, what shall be the area? It is to be determined by the regulation notified by the commission. And generally, what has been seen is that; it is the revenue district which is a demarcated area for the government for geographical division of the countries, or I will say, geographical division of States in the country is what is being considered as the parameter.

Generally, this is what is been considered as a kind of benchmarking of parameter that what is the revenue district? What is the municipal corporation limit? These are the different parameters which are being taken into account. So, generally, distribution license has been given in that area. So, he has a license to supply electricity to the consumers in that defined area. So, what is the area that is also being notified by the commission and accordingly, the licensee's responsibility comes into picture.

What is distribution system? As I said that distribution system, distribution segment starts from where transmission segment ends. And therefore, what is distribution system? It says a system of wires and associated facilities between the delivery points where transmission line ends, and it starts from the point of the connection to the installation of the consumer.

So, this is what you find is the distribution system. So that there should not be any confusion with regard to the identification of the obligation that who has the obligation to maintain it, so there should not be any confusion that whether it should be a responsibility of the transmission utility or it should be a responsibility of the generating company or it is of the distribution license. And therefore, it categorically defines that between the delivery points on the transmission lines or the generating stations' connection and the point of connection to the installation of the consumers.

Now why generating station here? As I said, if you recall that this Act has introduced multi-buyer model, so there is a possibility of the distribution licensee getting the electricity directly from the generating station. And obviously, in that case, what you would find that from where it is being the voltage has been scaled down, and the very connection which is been given to the consumer, the connection which is being provided to the consumer, that very portion is to be considered as the distribution system.

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- **Legislative Scheme**
 - no person shall distribute electricity unless he is authorised to do so by a licence u/s 14
 - App. Commission shall issue licence – 25 years
 - Two or more persons may get licence within same area to supply electricity to customers – through their own distribution system (Parallel Licensing)
 - Certain conditions are to be ascertained
 - No separate licence - If distribution licensee proposes to undertake distribution of electricity through another person

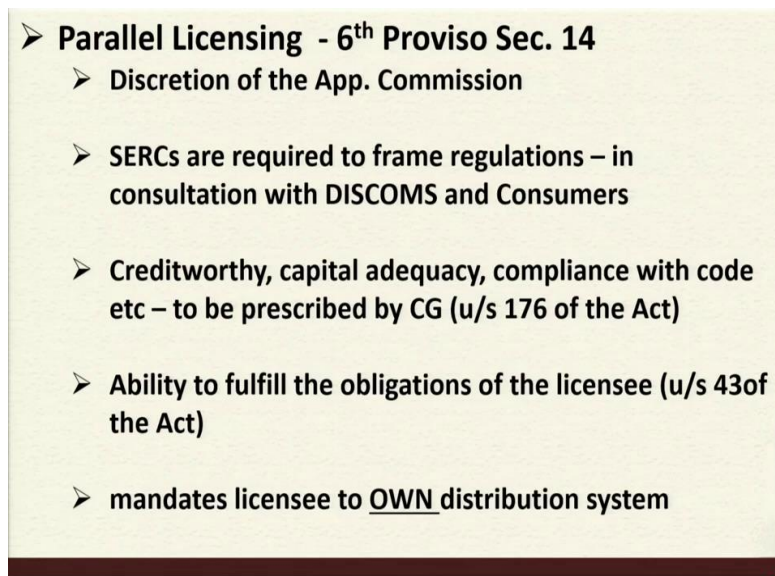
Now generation has been made a delicensed activity, but then transmission and distribution continued to be a licensed and regulated activity. So, Section 14 says that no person shall be allowed to engage into distribution business unless and until there is a license which has been

granted by the appropriate commission, and then it says once the conditions are being fulfilled, then license can be given for 25 years.

So, it is a licensed activity, and it is a regulated activity. Now, in this, you find that section 14 makes an important departure, what is that important departure? It says that in one area you can have more than one distribution licensee, and what we call it as a parallel licensee, it says two or more persons can get license within same area to supply electricity. So, what are the area I was referring to, which was mentioned in section 2 subsection 17, that there is an area demarcated and in that area, you have more than one licensee operating.

Further, if distribution licensee pulls in some other person proposes to undertake the distribution of electricity through another person then that person need not apply for obtaining license. You may say there is something which is based on franchisee model.

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- **Parallel Licensing - 6th Proviso Sec. 14**
 - **Discretion of the App. Commission**
 - **SERCs are required to frame regulations – in consultation with DISCOMS and Consumers**
 - **Creditworthy, capital adequacy, compliance with code etc – to be prescribed by CG (u/s 176 of the Act)**
 - **Ability to fulfill the obligations of the licensee (u/s 43of the Act)**
 - **mandates licensee to OWN distribution system**

But, now come back to parallel licensing, parallel licensee appears to be a very revolutionary idea, it is a very important provision in the Act. It is all about giving choice to the consumers.

Here, it is for the consumer to decide in this system that the electricity is to be bought from whom? You can very well draw an analogy with telecommunication sector that I, as a consumer, I have a choice whether I should go with Airtel or I should go with Jio or I should go with BSNL. Something similar has also been visualized and envisaged for electricity sector, and parallel licensee is an attempt to ensure that as a reality. What are the conditions for granting parallel licensee? That is what is given in the sixth proviso of section 14.

If you look at the language of section 14 sixth proviso, you would find that there are conditions laid down. Conditions in a sense that it is been divided into different parts. First and foremost, it says that to give parallel license to the applicant is not something which is a matter of an obligation on the part of the appropriate commission.

It is a discretion which has been entrusted. So, appropriate commission would wait, would evaluate that whether the situation demands the conformant of the license or not. Whether the grant of license would promote competition or it would disturb, or distort the market. So, that is why this discretion is given. Though it has been said in the Act that while exercising the discretion what is needed is to see that the one who is applying to get the parallel license, what is his credit worthiness? Whether that applicant has enough capital to meet the universal service obligation under section 43 or not? Whether it has necessary competence to follow the code which is being framed by the commission.

Now, it says that the regulatory commission at the state level for parallel licensee needs to formulate the regulation in consultation with the DISCOMS and the consumer. Why this consultation? Because DISCOMS are already operating, and consumers need to know that at the end of the day, whether it would be benefiting them or not. Then it says that the one who has been given parallel license, that licensee can very well lay down its own distribution system meaning thereby, there is a possibility of duplication of infrastructure in the same area.

So, if licensee X is already operating, let us say in one area, and licensee Y has been given a license in the same area so, there can be wire for licensee X as well as of licensee Y. Having said so, the law also says section 14 sixth proviso says, that only because there is a licensee available that should not be a case for refusal to grant the license. So, already if there is a distribution license in that area, that does not mean that second application is to be refused.

But then, we need to be very clear that even if the conditions are being fulfilled, it is for the appropriate commission to take a call. Because the law in section 14 sixth proviso says that appropriate commission shall not refuse to grant the license if there is already a licensee operating in that area. That should not be interpreted in such a way that it imposes an obligation on the appropriate commission to grant the license and not to deny it because it is the discretion. So, the appropriate commission has to look into other circumstances. That is what is important to understand.

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- **Parallel Licensing -**
 - **Second Proviso to Section 62(1) –the Appropriate Commission may, for promoting competition among distribution licensees, fix only maximum ceiling of tariff for retail sale of electricity.**
 - **National Tariff Policy, 2016 - “5.9 The real benefits of competition would be available only with the emergence of appropriate market conditions. Shortages of power supply will need to be overcome. Multiple players will enhance the quality of service through competition.”**

Now, when you look at the parallel licensing, you have a provision of section 62 which says that the appropriate commission shall only fix the maximum ceiling of tariff for retail sale of electricity. So, then rest of the things are to be left between the consumers and the licensees to negotiate. And that is what is the case with tariff policy of 2016 when you see, I mean, it says that multiple players will enhance the quality of service through competition. So, this is what is the intent of the law, that if you have multiple players, if you give these choices on the consumer then consumer will get benefited through competition.

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These are the benefits; Competition is the benefit; you find that with the more players in the market, it will bring competition, and that will directly bring in better price to the consumers. Consumers will have a choice; consumers will no more be depending upon only one licensee which has been given the license in his area. If he is finding that the quality is not good, if service is not good, it can always switch over.

With more competition, with this kind of choices, not very difficult to visualize that it will also improve the financial health of the distribution segment. Because then, you can very well expect that the licensee will compete amongst each other to give best of the best service, and consumers should not shy away from paying for getting those services. And more so because the very reason that you have all kind of consumers which are there in the market. So, if you find industrial consumers getting a better quality from licensee one, it may discard the licensee from whom he was getting the electricity.

It will also put all the licensees in a position where they would deliver and always be ready to deliver in this apprehension that, if they are not delivering, they will lose out the consumer, and that is what is the benefit of retail competition, and then it will certainly ensure the competitive tariffs.

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➤ Challenges –

- Requirement of 'own distribution system' in congested lanes
- Cherry-picking of certain categories of customers
- Lack of approvals
- resistance from the DISCOMS
- Minimum requirement in obtaining licences – supply to a minimum area of revenue district

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One of the challenges, as I said that section 14 sixth proviso says that the second licensee can very well have its own distribution system, own distribution system meaning thereby that it is, that the license is allowed to have its own wire, own metering and all, now when not very difficult to visualize that already cities in India are well congested. If you go and look at the electric poles in your locality, you would find how many wires are there and then, on the top of it, if you allow this; obviously, it will have a very heavy cost, it will put a very heavy cost on the system.

Another important, you know and significant challenge is cherry picking; what is cherry picking? How do we understand this that the licensee whether the second licensee or the first licensee will always try its best not to lose paying consumers, the one who has the ability to pay. Now, if there is already a distribution licensee operating in that area, so obviously, he has an obligation to supply electricity to all. That is what section 43 says, which will be discussing in detail in the next session.

Now, if the second licensee comes into the picture and the second licensee makes the offer to supply electricity only to industrial or commercial consumers, imagine what would happen to that distribution licensee who was already operating in that area earlier. He would lose valuable customer, and there is all possibility that second licensee would try to attract those consumers because they are the one who are going to pay regularly, they are the one who are going to pay higher tariff. So, this cherry picking is another important area of concern. And

then in that case, the first distribution licensee will face it difficult to sustain financially because then earlier distribution licensee, the one who is given the license to supply electricity at the first instance perhaps, he may end up only supplying electricity to the set of consumers who are getting the electricity on subsidized price. And that is why if you recall, there is a provision that while framing the regulations for parallel licensee, the regulatory commission must consult DISCOMS because instead of promoting the competition, this would lead to distorting the market. Another challenge is the lack of approvals; as I said, this is connected with this that DISCOMS may raise the objection and in that regard, perhaps, regulatory commission may not approve. Many times, it may happen that it may be on a genuine reason, but then you cannot rule out the possibility of this; you cannot rule out the possibility of rejection of the application on unfounded grounds.

There is just a kind of unfounded fear that we will lose out high end consumers. So, perhaps that may also act as reason for not approving. And that is the reason why you find that DISCOMS are resisting to this drive. They are apprehensive of this fact that perhaps because they do have a license to supply electricity, they will continue to supply electricity to only residential or the set of consumers who are getting electricity on subsidized price and the good one, the one who are having higher ability to pay they will go to the second licensee.

Another important thing, as I said, is that the area; what is that area? It says that minimum requirement for obtaining license at that set location that is a minimum area of revenue district. So, perhaps that may be a discouraging factor; why discouraging because that area may be so big that enough resources may not be there with the applicant, and he may get discouraged to apply for it, so that is another important concern.

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- **M/S Noida Power Company Ltd. v. Paschimanchal Vidyut Vitran Nigam Ltd. (2011 – APTEL)**
 - Appellant was distribution licensee in greater noida
 - Second Licence was granted to the respondent
 - Grant of parallel licence was challenged

- **Held: discretion lies with the App. Commission**
 - 'May' and 'shall be refused grant of licence on the ground that there already exists'
 - No right to get the licence if conditions are being met
 - Cherry-picking should not be allowed
 - Phased manner development of network – not allowed
 - Second licence was wrongly granted

Now, before we conclude this session, this is an important case to read; where in 2011, the Appellate Tribunal said in the case of *M/S Noida power company limited* versus *Paschimanchal Vidyut Vitran Nigam Limited*, here you find that Appellant was the distribution licensee in the area of greater Noida. The Paschimanchal Vidyut Vitran Nigam Limited applied as a kind of second licensee, the request was granted, the respondent, i.e., the Paschimanchal Vidyut Vitran Nigam Limited was given the license as a second licensee, this was challenged on the ground that the respondent was not fulfilling the criteria and therefore appropriate commission was wrong in giving the license particularly, it was argued that appropriate commission needs to also look at that whether the credentials submitted, they are satisfying the statutory requirement or not.

Now, the appellant here built the case on the language of section 14 sixth proviso where it says that appropriate commission may give license; meaning thereby that even if the conditions are fulfilled, there may be other genuine reasons for the appropriate commission to deny. So, it is not a case, or it should not be the case of the respondent, that if the conditions are fulfilled, appropriate commission is under an obligation; the Tribunal said no. There could be a situation where even if the conditions are fulfilled, as I said that, if the grant of parallel licensees, second licensee would cause disturbance in the market, appropriate commission can very well deny, can very well reject the application.

So, in this regard, the Tribunal said that the last part of sixth proviso of section 14, which says that shall not be refused on the ground of the presence of distribution licensee that is just

a condition, but that does not mean that appropriate commission is under an obligation. And therefore, it says that the applicant may not have the right to get the license if conditions are not being made. And in this case, what happened; the respondent was given a considerable timeline to develop the distribution network that was given up to five years and the requirement of capital was not there. There was just an assurance from the state-owned company. And on this premise, the court said that the law is very clear that once the license is given, there is immediate responsibility on the licensee to supply electricity.

Therefore, this very concession given of developing that infrastructure in a phased manner goes against the statutory scheme. So, even if apparently the respondent has fulfilled the conditions laid down in the sixth proviso of section 14. One may argue that the appropriate commission can very well look into other factors and then can reject the application. And in this case, the Appellate Tribunal has said that the second license to the respondent was not given as per the law and, therefore, it must be rejected; it must be withdrawn. Thank you very much.